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The Silent Killer: A Review of Psychosocial Factors and Systems-Level Interventions that Address Hypertension in African American Men

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Abstract

African American men suffer from hypertension at higher rates than any other ethnic group regardless of age or sex. The studies suggest that psychosocial issues such as racial discrimination, quality of care, and access of healthcare (often lack of insurance) also play a vital role in uncontrolled hypertension among African American men. Although there is not just one approach to successfully addressing health behaviors related to African American men, there are some interventions that provide a successful strategy of community based education and support that have shown positive results. The outcomes of these studies indicate that more research is needed. The HHS has made a commitment to continue working at reducing racial and ethnic health disparities by creating the *National Stakeholder Strategy for Achieving Health Equity (National Stakeholder strategy)*. The HHS developed an action plan that integrates with policy and programs that are a part of the Affordable Care Act. In this manuscript I will examine studies that address African American men with hypertension and the factors that prevent them from addressing them. The results of these studies give hope that the HHS will make progress on eliminating the impact of hypertension in the African American population by collaborating on community-based interventions.

Keywords: Hypertension, African American men, Psychosocial

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African Americans develop hypertension at far greater rates than any other ethnic group. In fact, hypertension is developed at an earlier age in African Americans than any other population and is usually more severe. The severity of hypertension in African Americans is known to cause organ damage and place individuals at risk for developing heart disease, kidney disease and strokes (CDC, 2011). According to the CDC (2011), African American men also bear the burden of psychosocial issues such as racial discrimination, quality of care and health insurance. These issues are contributing factors that cause uncontrolled hypertension. Psychosocial issues have affected African American men in ways that make it almost impossible for them to control their blood pressure.

Hypertension also known as high blood pressure is characterized as the force of blood pushing against the walls of the arteries (AHA, 2007). Blood is pumped into arteries via the heart. The arteries carry blood throughout the body. Blood pressure is the result of two causes of motion. The first cause takes place when the heart pumps blood through the arteries through the circulatory system. The second cause of motion happens when the arteries resist blood flow (AHA, 2007).

Normal blood pressure is considered to be less than 120/80mmHg. The first number (120) is known as systolic pressure and occurs when the heart beats. The second number (80) is known as diastolic pressure and occurs when the heart is at rest between beats (AHA, 2007). Adults with a blood pressure reading of 140/90mm Hg or higher have high blood pressure which is known as hypertension (AHA, 2007)

Hypertension was listed as the primary or contributing cause of death for 348,000 Americans in 2009, or nearly 1,000 deaths a day. Hypertension was listed on death certificates as the primary cause of death of 62,000 Americans in 2009. In the United States, about 77.9 million (1 out of every 3) adults have hypertension (AHA, 2013). Data from NHANES (2007-10) showed that of those with hypertension, 82% are aware they have it, 75% are under current treatment, 53% have it controlled, and 48% do not have it controlled. Projections show that by 2030, prevalence of hypertension will increase 7% from 2013 estimates (AHA, 2013). Hypertension costs the nation almost 131 billion annually in direct medical expenses and 25 billion in lost productivity (Centers for Disease Control and Prevention (CDC), 2011). Individuals with hypertension are at risk for heart disease and stroke which are the first and third leading causes of death in the United States (CDC, 2011). Data from the American Heart Association (AHA (2013) reported that about 69% of people who have a first heart attack, 77% who have a first stroke, and 74% who have congestive heart failure have hypertension.

Hypertension is called the "silent killer" (AHA, 2007). There are no symptoms associated with hypertension. Monitoring blood pressure is the only mechanism in place to detect hypertension (AHA, 2007). African Americans have a greater prevalence of hypertension related diseases such as stroke, heart attack, congestive heart failure, and kidney failure (AHA, 2007). Having one's blood pressure checked regularly will increase awareness of hypertension treatment and reduce risk of death due to hypertension-related diseases (AHA, 2007).

Purpose Statement:

The purpose of this manuscript is to review the literature of psychosocial issues such as racial discrimination, quality of care, and health in African American men with hypertension. Researchers in the field of Public Health hypothesize that perceived discrimination is directly related to hypertension and that health behav-

iors are partially responsible for the association between the two (Sims, 2012). Other implications are that African American men are less likely to participate in preventive health care, furthering their chances of being at risk for heart disease and stroke. One significant factor in the disproportionate mortality and morbidity of AA men and hypertension is lack of health insurance: 25% of African American men are uninsured compared to 10% of white men (Bonhomme, 2011). Poor lifestyle choices and harmful environmental conditions are also contributing factors that cause AA men to have measurably poorer health outcomes (Bonhomme, 2011)

The U.S. Department of Health and Human Services' program Healthy People 2020 outlines steps that can be taken to promote health and prevent diseases like hypertension. High blood pressure control is a public health priority. The CDC has made efforts through state HDSP programs (State-Heart Disease and Stroke Prevention) to address high blood pressure control in this population. Eliminating health disparities among vulnerable populations is also a CDC priority and Healthy People 2020 goal (CDC, 2013).

Methods/Search Strategy

The literature review was structured to investigate contributing psychosocial risk factors associated with hypertension and African America men. Connelly Library data-bases (CINAHL, Summon, and ProQuest) were searched using keywords: "African American men," "hypertension," and "psychosocial factors". Articles eligible for inclusion in the literature review were published in the last five years (2008-2013) to review the most current research and most recent prevalence statistics. The search brought back 25 peer reviewed journal articles, of which 10 were used. The other 15 articles did not relate specifically to African American men and did not include psychosocial factors that are directly related to hypertension in African American men. A manual search of the retrieved articles was also done to search for articles that met the search criteria.

The US HHS, CDC and the AHA were instrumental in providing information and statistics about health disparities in the African American population.

Literature Review

African American men's knowledge, beliefs, and attitudes about hypertension have affected their health behaviors, perception of susceptibility to hypertension, and adherence to treatment (CDC, 2010). Older African American men who have lower socioeconomic status and lower education achievement are more likely to have beliefs about hypertension that are non-clinical. African American men who are older are also more likely to have difficulty believing they have hypertension when they do not have symptoms (CDC, 2010). (Contributing factor; Health Beliefs)

Low socioeconomic status plays a stronger role in hypertension among African American men compared to whites. Low socioeconomic status and lack of health insurance make it difficult for African American men to receive sufficient health care and early diagnosis and treatment of hypertension (Bonhomme, 2011; Heard, 2011). African American men diagnosed with hypertension and living in racially isolated communities are at a greater risk for poor health. Socioeconomic status is an important factor in the health status of African American men, however even after adjusting for this factor; hypertension rates are still considerably higher than any other group (Bonhomme, 2011; Heard, 2011; CDC, 2010). (Contributing factor: socioeconomic status and isolation)

Racism and hypertension have been found to be linked in several studies. Stress and low self- esteem are brought on by perceived racism, which can ultimately negatively affect blood pressure levels (Sims, 2012; Hammond, 2010; Bonhomme, 2011). The association between contact to discrimination and hypertension among African American men differ based on socioeconomic status. Professional African American men have greater social and economic resources and the ability to name and challenge discrimination. These have become protective factors for professional African American men (Sims, 2012; Hammond, 2010; Bonhomme, 2011; CDC, 2010). This behavior is described as John Henryism. Behaviors used to cope with psychosocial and environmental stressors that are demonstrated by African Americans determined to succeed in the face of obstacles are known as John Henryism (CDC, 2010). Among African American with low socio-economic status, those with higher John Henryism were found to have lower blood pressures than those with low John Henryism (CDC, 2010). Contributing factor: perceived racism and discrimination)

African American men also have a great mistrust for the healthcare system and health professionals. Mistrust of the medical system has led to less use of medical services and medications among African Americans compared to whites. Lack of communication and lack of cultural competence can have damaging effects between providers and African American men (Hammond, 2010; CDC, 2010). (Contributing factor: Historical medical abuse of African American men, example: "Tuskegee Study of Untreated Syphilis in the Negro Male")

Control of hypertension can also be influenced by health insurance coverage.

The 2006 Population Survey Data (most recent available data) reports that African American men were more likely to be uninsured than their white counterparts (23% compared to 17%) and less likely to have private insurance coverage (54% compared to 70%). African American men are able to control their blood pressure successfully when they have health coverage. Unsuccessful control of blood pressure may also be due to lack of prescription drug coverage and access to hypertensive drugs (Hammond, 2010; CDC, 2010). Contributing factor: Access to healthcare because of lack of insurance coverage)

Hypertensive patients can adhere to their medication regimen better with good quality care. Successful hypertension control has been attributed to seeing the same health care provider. African American men with hypertension are less likely than white men to see the same health care provider (CDC, 2010). African American men who are compliant are more likely to report a more trusting, honest relationship with their primary care physician and that their physician was helpful in managing their treatment. Some essential components that are necessary for treating African

American men with hypertension include establishing good doctor-patient communication and trust, addressing possible racial disparities, and creating patient-centered interventions (CDC, 2010).

Discussion:

Poorer health outcomes in African American men have been associated with strength, independence, a reluctance to seek help, and denial of vulnerability (Sims, 2012; Bruce, 2011; Hammond, 2010; CDC, 2010). Regular doctor visits and treatment for illnesses are health seeking behaviors that are seen as expressions of helplessness or weakness in the African American community. African American men are more prone to view these behaviors as such due to the history of slavery, segregation, racism, and discrimination (Sims, 2012; Bruce, 2011; Hammond, 2010; CDC, 2010).

In order to fully understand the role and level of influence of psychosocial factors that affect health disparities, additional research is needed (Sims, 2010; Heard, 2011; CDC, 2010).

The increase in the mortality rates of heart disease and stroke associated with hypertension among African American men is evident by the growing disparities among this population. African American men suffer from hypertension at higher rates than any other ethnic group. Hypertension on average affects more men than women under 45 years of age and more women than men over 65 years and older (CDC, 2010).

Implications:

African American men are more likely to have hypertension and are more likely to be diagnosed by their primary care physician as having hypertension (CDC, 2010). Among adults 20 and older in the United States, 43% of African American men have hypertension compared to 33% of whites (AHA, 2013). . There has been a significant increase in the awareness of hypertension, treatment for hypertension and control of hypertension in African American men. During the years from 2007 to 2010, more than half of African American men were aware that they had hypertension. More than two thirds, (69%) were being treated, while only a small percentage (40%) had their hypertension under control. African Americans show better treatment and control of hypertension as they get older (AHA, 2013).

From 1999 to 2009 the death rate of hypertension increased 17%, and the actual number of deaths rose 44%. The overall death rate from hypertension was 18.5/ 100,000. The death rates for African American men (52%) showed an increase compared to white men (17%) and African American women (38%) during the years of 2007 to 2010 (AHA, 2013). . African American men and women as well as white men had lower rates of death due to hypertension related heart and cerebrovascular disease during the period from 1999 to 2009, however African American men remained highest among the three groups (AHA, 2013).

1. Public Health Practice Programs

The following programs on Africa American men and hypertension have contributed to a reduction in hypertension. They include peer education, provide support within a social network, and include collaboration with healthcare providers. These programs demonstrate how community-based programs in a social context can work with health care providers in ways that would benefit African American men with hypertension (CDC, 2010).

The systems-level interventions *Can Barbers Cut Blood Pressure Too* and *Stroke, Hypertension and Prostate Education Intervention Team (Shape IT)* are related to hypertension control in African American men. The results of these interventions were divided into three categories; overall lessons, lessons on program participation by African American men, and lessons on cultural competency (CDC, 2010).

Overall lessons involved visibility, evaluation, resources, collaboration, and sustainability. Visibility builds trust with program participants and the community. Interventions that involve members of the community such as barbers, health educators, and members of faith based organizations should always include incentives for programs participants in order to maintain participation. A resource for follow-up care is a necessary for individuals who have been identified as having a health problem. Diabetes, obesity, and smoking are known risk factors for hypertension. Collaborating with programs focusing on these risk factors may increase the effectiveness of the intervention. These factors may build a stronger and better intervention, however, in order to sustain the intervention, community involvement is needed (CDC, 2010).

Program participation by African American men required family involvement, community member participation, peer to peer approach, convenience, tailored messages, and minority staff. Family involvement empowers African American men to be accountable for their own health. Soliciting prominent community members such as, faith leaders, barbers, health educators, and local celebrities inspire African American men to participate in health interventions. African American men are more likely to participate in groups, such as group blood pressure screening interventions rather than individual sessions. Making programs convenient is another way to have better program participation among African American men. Time is a barrier for African American men and programs should be considerate of work schedules. Tailoring the message for younger and older audiences is always a plus. Older men may listen to a message held at a place of worship. The younger audience is more likely to be interested in web-based education campaigns. Recruit and follow-up on young African American inner city men is a very difficult task; therefore having minority staff that is enthusiastic, energetic, and committed is vital to recruitment and retention (CDC, 2010).

Lessons on cultural competency included having culturally relevant program materials as well as the use of language familiar to members of the community. Representation of African American men should always be included in visual material (CDC, 2010).

2. Future Research

Bruce (2011) states that further research is needed to investigate how psychosocial factors (i.e., stress, depression, and anxiety) may influence the link between weight status and hypertension among African American men. More research is needed to state the

method through which extra weight and weight gain intensifies the development and progression of high blood pressure. A more subtle approach of the association among African American men and hypertension would help health care providers and professionals to create culturally specific programs and interventions aimed to help at-risk African American men to manage their environments and behaviors to reduce risks for hypertension.

Heard (2011) states that further research is needed to clarify the ways in which perceived stress/depression effect blood pressure. Understanding the possible ways requires more knowledge about the types of stress that fall under the category of perceived stress. This would enable researchers to evaluate how different stressors affect blood pressure. Different stressors may produce different types of outcomes.

Research was focused blood on pressure alone. Analyzing how perceived stress and depression affect other areas that is responsible for development of hypertension (such as pulse pressure) might be helpful (Heard, 2011). Evaluating certain lifestyle factors that influence blood pressure such as smoking, alcohol use, and weight could be helpful in analyzing perceived stress and depression and its effect on blood pressure (Heard, 2011).

3. Future Policy

The Affordable Care Act (ACA) (2014) addresses eliminating disparities that African Americans are now facing in their health and health care. The ACA will fight health disparities by investing in data collection and research about health disparities. Initiatives will be expanded to increase the racial and ethnic diversity of health care professionals and strengthen cultural competency training among health care providers (Whitehouse, 2012). The Act (2014) implements a strong focus on minority health by elevating the National Center on Minority Health and Health Disparities at the National Institutes of Health from a Center to a full Institute, reflecting an enhanced focus on minority health. The ACA will also codify into law the Office of Minority Health within the Department of Health and Human Services (HHS) and a network of minority health offices within HHS, to monitor health, health care trends, and quality of care among minority patients and evaluate the success of minority health programs and initiatives (Whitehouse, 2012).

Conclusion

Hypertension over the years has progressed in record numbers among African American men. Psychosocial issues such as lack of insurance, access to health care, lack of education, and low socioeconomic status have been implicated as causes and delays in treatment. However, the number of interventions, studies, and research on these issues has been insufficient and warrants continued efforts to address these health disparities. Programs and policies are being implemented to eliminate health disparities among this population through the National Partnership for Action to End Health Disparities (NPA). The NPA has created 'the *National Stakeholder Strategy for Achieving Health Equity (*National Stakeholder Strategy), It is a roadmap for eliminating health disparities through cooperative and strategic actions. Regional Blueprints for Action will align with the National Stakeholder Strategy to help guide action at the local, state, and regional levels. Targeted initiatives will be organized by partners across the public and private sectors in support of the NPA. A second outcome is the HHS Action Plan to reduce Ethnic and Health Disparities, which was released together with the National Stakeholder Strategy. It outlines goals and actions HHS will take to reduce health disparities among racial and ethnic minorities. It builds on provisions of the Affordable Care Act. It will be used by HHS agencies to assess the impact of policies and programs on racial and ethnic disparities, and to promote integrated approaches, evidence-based programs and best practices to reduce these disparities." The HHS will work with local communities to eliminate these disparities and will decrease the disproportionate burdens of disease, disability, and premature deaths (White House, 2012).

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